

Ammerman's AirXpeler®

20d
Amm

**COMPLETE SPECIFICATION
DATA OF ALL VENTILATING
EQUIPMENT FOR THE
ARCHITECT and ENGINEER**



Patent No. 2571513, 2666378
others pending

EXHAUSTERS—Wall and Roof

- power operated
direct driven
- gravity siphon

FRESH AIR SUPPLY UNITS

AIR RELIEF UNITS

***All Having Similar
Outward Appearance***

LOW CONTOUR BLACKOUT DESIGN



Photo courtesy U. S. Steel Corporation, Diesel Engine Shop

TABLE OF CONTENTS

	Page	Section		Page	Section
EXHAUSTERS—wall or roof mounted, direct driven, gravity siphon, fresh air supply, flue caps, air relief units.	2, 3, 4	A	EXHAUST SYSTEMS—overhead Swing-O-Way and under-floor types.	10, 11	C
EXHAUSTERS—roof mounted, power operated, belt driven. LO-BOY, HI-BOY.	5, 6, 7	B	DRAFT INDUCERS—direct driven, boiler, furnaces, home fireplaces.	12	C
EXHAUSTERS—Hi-Boy (PRE) direct driven. Lo-Boy gravity siphon, fresh air supply, air relief units.	8	B	EXHAUSTERS—upblast, power roof—"Rul Air" and "RV" types, gravity siphon.	12	C
KITCHEN FANS—twin blower.	9	C	DAMPERS—air control, fusible link fire, back pressure, wall louvers.	12	C
CEILING FANS—100 to 500 CFM.	9	C	ACCESS DOORS—for ducts.	12	C

AMMERMAN COMPANY, INC.

• MEMBER AMCA •

STILLWATER, MINNESOTA



EXHAUSTERS, WALL or ROOF MOUNTED-DELUXE QUALITY

Section A

AIRXPELER EXHAUSTERS—ten types of roof exhausters and Fresh Air Supply units, with the same similar outward appearance. Designed by engineers for present-day buildings, ships and other applications. Compare the low height and streamlined appearance of the AIRXPELER with the usual gravity type or utility belt driven blowers and pent house units. Sturdily constructed of heavy aluminum. Motors are ball bearing located out of the line of airflow under a ventilated cover. Bird and insect proofed on request.

C.F.M. CAPACITY TABLE NO. 1 'PB'-PRE, WALL MEMBER AMCA

Certified and tested in accordance with ASHVE and NAFM Plate VI

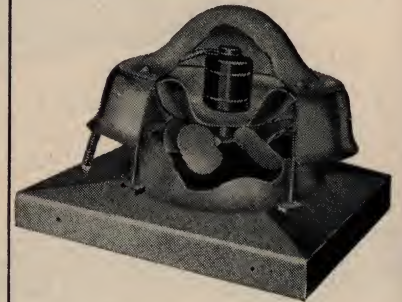
Noise Level	Unit	H.P.	R.P.M.	0"	1/8"	1/4"	3/8"	1/2"
VQ	PB-6C	1/20	860	55	33			
VQ	PB-6B	1/20	1140	96	79	54		
VQ	PB-6D	1/80	1500	120	100	71		
VQ	PB-6A	1/20	1725	141	116	84		
VQ	PB-6AX	1/20	1725/1140	See PB-6A for High and PB-6B for Low Capacity.				
VQ	PB-6BX	1/20	1140/870	See PB-6B for High and PB-6C for Low Capacity.				
VQ	PB-6DX	1/80	1500/1000/700					
VQ	PB-6AV	1/20	1725 to 0	See PB-6A for High Cap. "V" Controller reduces CFM to zero				
VQ	PB-6BV	1/20	1140 to 0	See PB-6B for High Cap. "V" Controller reduces CFM to zero				
VQ	PB-8C	1/20	860	210	191	175	159	
VQ	PB-8B	1/20	1140	290	256	235	213	
VQ	PB-8D	1/80	1500	354	331	303	277	
VQ	PB-8A	1/20	1725	420	375	344	313	
VQ	PB-8AX, 8BX, 8DX, 8AV, 8BV, follows PB-6 outline.							
VQ	PB-10C	1/20	860	420	375	344	313	
VQ	PB-10B	1/20	1140	547	500	459	417	
VQ	PB-10D	1/30	1500	657	580	532	483	
VQ	PB-10A	1/6	1725	821	749	689	625	
VQ	PB-10AX, 10BX, 10DX, 10AV, 10BV, follows PB-6 outline.							
VQ	PB-12C	1/20	860	709	665	621	579	
VQ	PB-12B	1/20	1140	946	887	829	772	625
VQ	PB-12A	1/6	1725	1419	1330	1243	1158	938
VQ	PB-12BX, 12AV, 12BV, follows PB-6 outline.							
VQ	PB-14C	1/20	860	1129	1059	989	922	749
VQ	PB-14B	1/8	1140	1506	1412	1319	1229	1000
VQ	PB-14A	1/4	1725	2259	2118	1979	1844	1499
VQ	PB-14AX, 14BX, 14AV, 14BV, follows PB-6 outline.							
VQ	PB-16C	1/8	860	1680	1575	1472	1371	1110
VQ	PB-16B	1/4	1140	2240	2099	1963	1823	1480
VQ	PB-16A	1/2	1725	3360	3149	2944	2742	2220
VQ	PB-16AX, 16BX, 16AV, 16BV, follows PB-6 outline.							
VQ	PB-16AY	1/2	1725/860	follows A and C C.F.M.				
C	PB-18C	1/6	860	2395	2242	2098	1895	1583
C	PB-18B	1/3	1140	3193	2994	2798	2527	2110
C	PB-18A	3/4	1725	4790	4484	4197	3791	3165
C	PB-18AX, 18BX, 18AV, 18BV, follows PB-6 outline.							
C	PB-18AY	3/4	1725/860	See A & C Air Movements.				
I	PB-20C	1/6	860	3252	2966	2730	2476	1967
I	PB-20B	1/2	1140	4333	3955	3638	3302	2623
I	PB-20BX	1/2	20BV, follows PB-6 outline.					
I	PB-20A	1	1725	6505	5932	5461	4953	3934
I	PB-20AY	1	1725/860	See A & C for C.F.M.				
C	PB-22C	1/2	860	5515	5019	4625	4194	3331
C	PB-22B	1	1140	7353	6706	6167	5592	4441
C	PB-22A	2	1725	11030	10039	9250	8388	6662
C	PB-22AY	2	1725/860	See A & C for air movements.				
C	PB-22BY	1	1140/575	See B for High air movement.				
C	PB-24C	3/4	860	6725	6193	5728	5228	4145
C	PB-24B	1 1/2	1140	9020	8257	7638	6970	5527
C	PB-24A	3	1725	13038	12386	11455	10455	8291
C	PB-24AY, 24BY	See PB-22 outline.						

NOISE LEVELS: VQ very quiet, Q quiet, C commercial, I industrial

AIRXPELER "V" UNITS

AIRXPELER "V" UNITS come equipped with variable motor speed controller that gives any desired rpm—from the top speed of motor to zero, as O-1725, O-1140. Can be used on single phase AirXpeler power exhauster with motors up to and including 1/2 hp, 1140 rpm, or 3/4 hp 1725 rpm, single phase, 115 volts 50/60 cycle, 7.5 amps. It is an auto transformer with movable brush contact arm; by turning the knob, it produces any motor rpm. Only the current, required to produce desired rpm is used.

"PB" (PRE) LO BOY



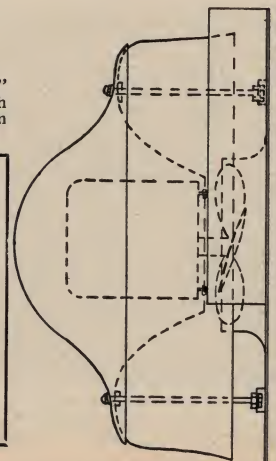
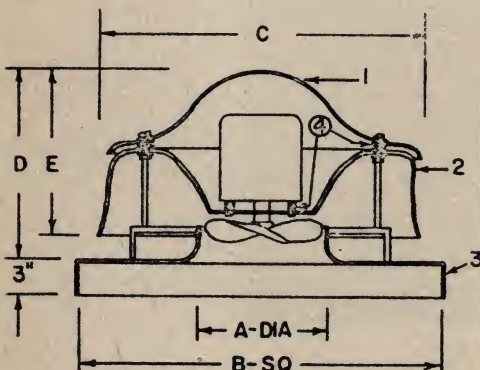
AIRXPELER "PB" (PRE) Power Roof and Wall Exhausters are very efficient and quiet for low static pressures up to 1/2 inch. Fans have 4 wide pressure built blades for quiet operation. Rubber grommets are installed around all points where metal contacts metal. "PB" units from No. 6 to No. 14, inclusive, are not noisy when run at 1725 RPM and can be used in Hospitals, Schools, or wherever room noise must be low. However, for real low noise level use 1140 or 860 RPM.

AIRXPELER WALL EXHAUSTERS

Units are similar in appearance and construction to roof-mounted "PRE" unit. However, base flange is eliminated with exception to top section which is bent to lap over storm band spinning to prevent rain and snow from entering the unit.

DIMENSIONS AND CURB DETAIL IN INCHES "PB" TABLE NO. 2—"PRE"—WALL-PFAS UNITS

SIZE	A	B	C	D	E	F	WT	GAUGE ALUMINUM		
								1	2	3
6	8	16	19	13	10	3	18	.063	.063	.063
8	9	16	19	13	10	3	18	.063	.063	.063
10	11	20	19	13	10	3	27	.063	.063	.063
12	13	24	23	14	11	3	31	.063	.063	.063
14	15	24	23	14	11	3	31	.063	.063	.063
16	17	28	27	16	13	3	48	.063	.063	.063
18	19	28	27	16	13	3	53	.063	.063	.063
20	21	36	36	21	15	3	78	.063	.080	.063
22	23	36	36	21	15	3	100	.063	.080	.063
24	25	36	36	21	15	3	117	.063	.080	.063



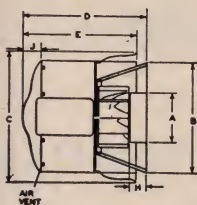


"BCD" BACKWARD CURVE DIRECT CONNECTED EXHAUSTERS

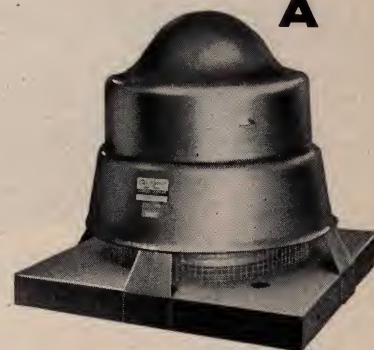
20c
Amm

ROOF Section A

WALL



NON OVERLOADING backward curve centrifugal fan wheel has been designed for optimum performance at each specified diameter. The lowest velocities possible reduce noise level to the absolute minimum, no sharp corners to produce turbulence. Motor directly connected to dynamically balanced wheel eliminates costly maintenance of belts, pulley and drive shaft bearings.

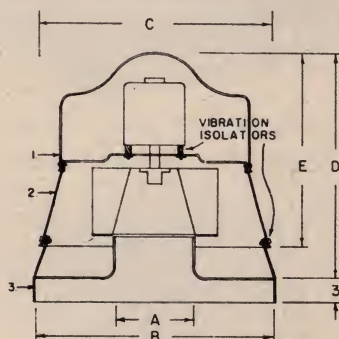


C.F.M. CAPACITY TABLE NO. 3 'BCD' EXHAUSTER
MEMBER AMCA

Certified and tested in accordance with ASHVE and NAFM Plate V

Noise Level	Unit Size	HP	RPM	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"
VQ	BCD 6A	1/20	1725	300	230	139				
VQ	BCD 6B	1/20	1140	195	75					
VQ	BCD 6C	1/20	860	160						
VQ	BCD 6DS	1/20	1500	280	200	110				
VQ	BCD 6AX	1/20	1725/1140	See BCD6A for HIGH & BCD6B for LOW capacity.						
VQ	BCD 6BX	1/20	1140/860	See BCD6B for HIGH & BCD6C for LOW capacity.						
VQ	BCD 6DSX	1/20	1500/1000/700	See BCD6D for HIGH & BCD6E for medium capacity.						
VQ	BCD 6AV	1/20	1725 to 0	See BCD6A for HIGH capacity, "V" Controller will reduce CFM to 0.						
VQ	BCD 6BV	1/20	1140 to 0	See BCD6B for HIGH capacity.						
VQ	BCD 7A	1/20	1725	570	500	410	285			
VQ	BCD 7B	1/20	1140	365	250					
VQ	BCD 7C	1/20	860	295						
VQ	BCD 7DS	1/20	1500	550	485	375	245			
VQ	BCD 7AX	1/20	1500	550	485	375	245			
7BX, 7DSX, 7AV, 7BV to arrive at HIGH capacities follow BCD 6 outline.										
VQ	BCD 9A	1/8	1725	1000	900	800	700	550	450	325
VQ	BCD 9B	1/20	1140	650	515	310				
VQ	BCD 9C	1/20	870	500	295					
VQ	BCD 9AX	1/20	870	500	295					
9BX, 9AV to arrive at HIGH capacities follow BCD 6 outline.										
Q	BCD 10A	1/4	1725	1560	1455	1350	1240	1115	930	750
VQ	BCD 10B	1/20	1140	1025	875	700	565			
VQ	BCD 10C	1/20	870	775	560	390				
C	BCD 10AX	1/20	870	775	560	390				
10BX, 10AV, 10BV to arrive at HIGH capacities follow BCD 6 outline.										
I	BCD 12A	1/2	1725	2350	2250	2075	1990	1825	1575	1050
VQ	BCD 12B	1/8	1140	1525	1350	1155	915	550		
VQ	BCD 12C	1/20	870	1150	925	575				
C	BCD 12AX	1/20	870	1150	925	575				
12BX, 12AV, 12BV to arrive at HIGH capacities follow BCD 6 outline.										
I	BCD 15A	1	1725	4600	4375	4220	4075	3915	3600	3300
C	BCD 15B	1/3	1140	3010	2750	2550	2300	1975	1100	
VQ	BCD 15C	1/6	860	2250	2000	1640	1200			
I	BCD 15AY	1/6	1725/860	BCD15AZ Four speeds 1725/1140/860/570 rpm)						
C	BCD 15BX	1/6	1725/860	BCD15AZ Four speeds 1725/1140/860/570 rpm)						
15BV to arrive at HIGH capacities follow BCD 6 outline.										
I	BCD 18A	3	1725	7850	7650	7510	7325	7125	6800	6500
C	BCD 18B	3/4	1140	5090	4900	4575	4310	4005	3375	2400
I	BCD 18AY	3/4	1140	5090	4900	4575	4310	4005	3375	2400
Follows 15AY and outline. BCD18BY 1140/570 rpm.										

NOISE LEVEL: VQ very quiet, Q quiet, C commercial, I industrial



DIMENSIONS & CURB DETAILS IN INCHES
TABLE NO. 4

SIZE	A	B	C	D	E	F	WT	ALUMINUM		
								1	2	3
6	5	16	15	17	14	3	21	.063	.063	.063
7	7	16	15	17	14	3	21	.063	.063	.063
9	8	20	19	20	16	3	33	.063	.063	.063
10	9	20	19	20	16	3	33	.063	.063	.063
12	11	24	22	23	19	3	49	.063	.063	.063
15	12	28	27	31	26	3	78	.063	.080	.063
18	15	28	27	31	26	3	120	.063	.080	.063

Specification for Architects and Engineers . . . Exhausters shall be AIRXPELER.
Size. Motor. Shall have a capacity of cubic feet of air per minute against a
resistance of inches static pressure. Manufactured by AMMERMAN CO. INC.,
Stillwater, Minnesota, or approved equal. Motor mount and Storm Band shall be one piece
spun of heavy Aluminum mounted on sturdy aluminum base so no exhausted air can come in
contact with direct connected motor.

GUARANTEE . . . AIRXPELERS are guaranteed against defective workman-
ship or material for a period of 5 years from date of shipment from factory, ex-
cept motors that carry standard motor guarantee. Guarantee does not include mis-
use, neglect or accidents. The Ammerman Co., Inc., under no circumstances
will be liable for cost incurred in installation or removal.

Section

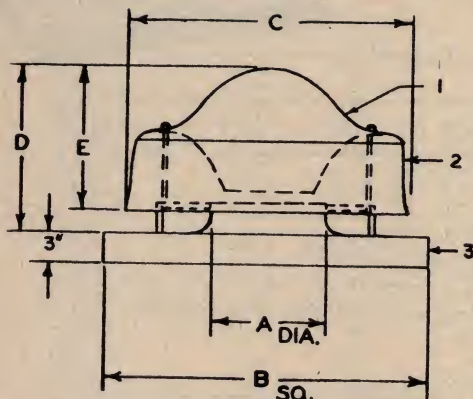
A



Airxpeler "GS" and "RC" Units

"GS" units can be used as GRAVITY EXHAUSTERS, FRESH AIR SUPPLY and RELIEF units. "GS" units are regular "PB" units less motor and pressure blade. Furnished with galvanized bird screen.

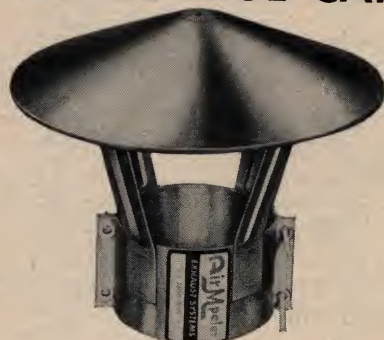
'GS' or 'FAS' CAPACITY DIMENSION DETAILS
IN INCHES TABLE NO. 5



Inlet Size	Area	A	B	C	D	E	F	WT	Aluminum Gauge		
									1	2	3
6	28	6	16	15	12	9	3	7	.063	.063	.063
8	50	8	16	15	12	9	3	7	.063	.063	.063
10	79	11	20	19	13	10	3	9	.063	.063	.063
12	113	13	24	23	14	11	3	12	.063	.063	.063
14	154	15	24	23	14	11	3	12	.063	.063	.063
16	201	17	28	28	16	13	3	16	.063	.063	.063
18	255	19	28	27	16	13	3	17	.063	.063	.063
20	315	21	30	36	21	15	3	28	.063	.080	.063
22	380	23	36	36	21	15	3	28	.063	.080	.063
24	453	25	36	36	21	15	3	28	.063	.080	.063
26	531	26	36	36	21	15	3	28	.063	.080	.063
28	616	28	36	36	21	15	3	28	.063	.080	.063

Capacity ratings at 5 M.P.H., 20° F. temp. diff. 40' stack height

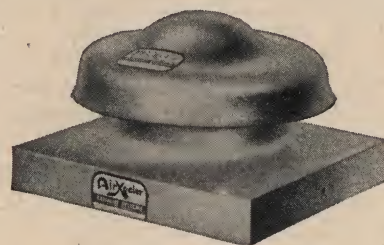
Airxpeler FLUE CAPS TYPE "D"



Flue caps built in 3 sizes. Constructed of sturdy aluminum with spun cap.

CC-4 for 3"-4" pipe
CC-6 for 5"-6" pipe
CC-8 for 7"-8" pipe

"RC" ROOF EXHAUSTERS or RELIEF UNITS

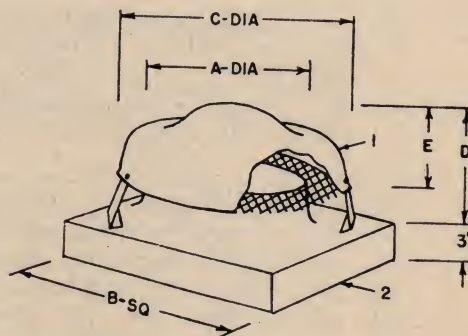


'RC' CURB DETAILS IN INCHES TABLE NO. 6

Inlet Size	Area	A	B	C	D	E	F	WT	Aluminum Gauge	
									1	2
RC3	7	3	12	8	6	3	3	3	.063	.063
RC4	13	4	12	8	6	3	3	3	.063	.063
RC5	20	5	12	12	9	6	3	4	.063	.063
RC6	28	6	16	16	10	7	3	6	.063	.063
RC8	50	8	16	16	10	7	3	6	.063	.063
RC10	79	11	20	20	10	7	3	8	.063	.063
RC12	113	13	24	20	10	7	3	9	.063	.063
RC14	154	14	24	20	10	7	3	9	.063	.063
RC16	201	16	28	25	10	7	3	11	.063	.063
RC18	255	19	28	25	10	7	3	11	.063	.063
RC20	315	21	36	35	13	8	3	22	.063	.063
RC22	380	23	36	35	13	8	3	22	.063	.063
RC24	453	25	36	35	13	8	3	22	.063	.063
RC26	531	26	36	38	13	8	3	22	.063	.063
RC28	616	28	36	38	13	8	3	22	.063	.063
RC30	707	30	44	44	13	8	3	30	.063	.080
RC32	804	32	44	44	13	8	3	30	.063	.080
RC34	908	34	44	53	13	8	3	33	.063	.080
RC36	1018	36	44	53	13	8	3	33	.063	.080
RC38	1134	38	44	53	13	8	3	33	.063	.080
RC40	1257	40	48	53	13	8	3	34	.063	.080
RC42	1385	42	48	53	13	8	3	34	.063	.080

Capacity ratings at 5 M.P.H., 20° F. temp. diff. 40' stack height.

"RC" is regular Airxpeler design—but spun from one piece of metal. Throats may be round up to 42 inches, square or rectangular up to 34 inches. For larger throats furnished as "RC" Lo Boy Airxpeler units see page 8. "RC" bases can be constructed in any size to accommodate roof openings. "RC" units may be used as GRAVITY VENTS.





NON-OVERLOADING BACKWARD CURVE

LO-BOY MODEL

EXHAUSTERS—roof mounted

• Power operated-belt driven

LO-BOY and HI-BOY models

• Gravity siphon

FRESH AIR SUPPLY UNITS

AIR RELIEF UNITS

DESIGNED FOR

LOWEST POSSIBLE CONTOUR

AIRMEPELER "BCB" LO BOY. The extremely low silhouette design accomplished by mounting the motor to the side of the unit. Height is reduced by ONE-HALF of the standard belted constructed types. Wheel is mounted between top and lower bearing—eliminating wheel wobble affording greater motor support. This construction assures longer belt and bearing life.

Capacity table of "BCB" offers a selection of sixteen (16) wheel sizes. Two hundred and four (204) constant speed combinations with tip speeds as low as 2000 F.P.M.

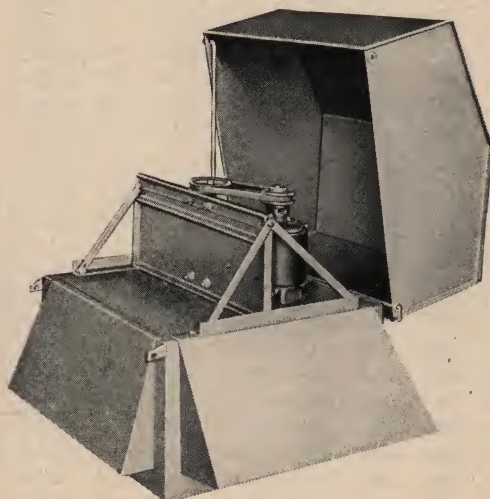
"BCB" units are equipped with standard *Safety Disconnecting Switch*. Bearings are grease type ball pillow blocks suitable for taking end thrust. Motors are ball bearing standard open NEMA frame of national manufacture—mounted entirely out of air stream. May be constant speed, two speed or four speed.

CONSTRUCTION: Standard construction consists of welded heavy structural steel frame, heavy 16 gauge steel base. Skirts and motor hoods 18 gauge steel. (Steel units phosphorus treated and painted to withstand moisture, steam, mild acids and lactic fumes).

Motor mount support is heavy angle iron, electric welded

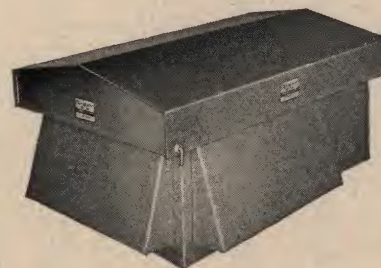
Special units with aluminum or copper skirts and motor hoods, or all stainless steel furnished on request.

Capacities above $\frac{3}{4}$ " S.P. furnished upon request.



'BCB'
HI BOY
MODEL

M o t o r
mount
support is heavy
angle iron
construction,
electric weld-
ed and is
mounted on
rubber, elim-
inating vi-
bration.

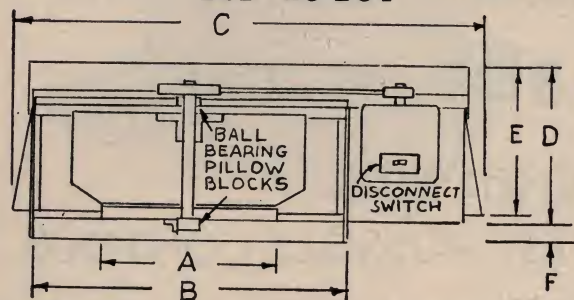


Automatic dampers may
be specified for mounting
inside of frame as illus-
trated.



Automatic dampers may be specified for mounting inside of frame as illustrated. HI-BOY and LO-BOY models easily serviced by removing outlet skirts, eliminating mounting dampers in base or curb or in damper section which reduces overall height of unit 10" or more. LO-BOY Dampers for inside mounting on frame patent applied for.

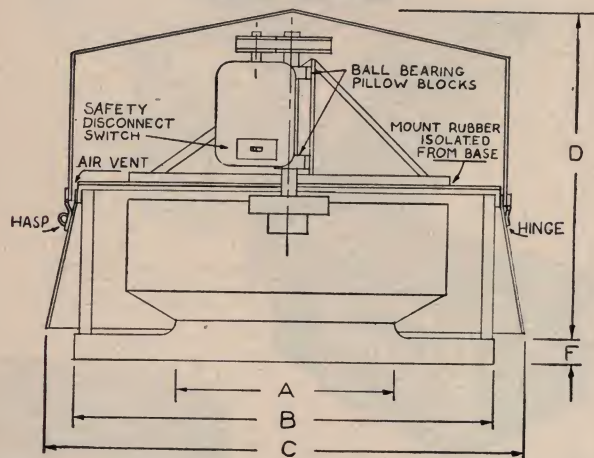
"BCB" LO BOY



DIMENSIONS & CURB DETAILS IN INCHES
TABLE No. 7

SIZE	A	B	C	D	F	WT
10	9	20	38	18	3	120
12	11	20	38	18	3	125
15	12	20	38	18	3	125
18	15	24	44	22	3	180
20	17	24	44	22	3	280
24	19	28	45	22	3	300
27	21	32	52	23	3	340
30	23	36	56	26	3	480
33	25	36	56	26	3	575
36	27	40	63	28	3	660
39	29	48	63	32	3	675
42	31	48	62	32	3	730
48	36	68	82	37	2	870
54	40	72	86	40	2	1150
60	45	80	94	44	2	1540
66	50	84	100	48	2	1900
72	54	92	108	53	2	2850

"BCB" HI BOY



DIMENSIONS & CURB DETAILS IN INCHES
TABLE No. 8

SIZE	A	B	C	D	F	WT	GAUGE
10	9	24	31	24	3	125	18
12	12	24	31	24	3	130	18
15	12	24	31	24	3	130	18
18	15	30	37	29	3	190	18
20	16	30	37	29	3	290	18
24	19	30	37	29	3	310	18
27	20	36	44	34	3	350	18
30	22	36	44	34	3	500	18
33	24	42	50	42	3	600	18
36	27	42	50	42	3	680	18
39	29	48	59	44	3	700	16
42	31	56	68	44	2	750	16
48	36	56	70	44	2	900	16
54	40	72	84	52	2	1200	16
60	45	80	94	53	2	1600	16
66	50	84	100	58	2	2000	16
72	54	92	108	62	2	3000	16

Unit Size	H.P.	Fan RPM	Tip Speed	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"
BCB10 1/6	727	2000	613	390						
BCB10 1/6	840	2310	700	490						
BCB10 1/6	968	2660	810	595	360					
BCB10 1/6	1050	2890	892	778	555					
BCB10 1/6	1140	3140	1010	870	680	360				
BCB10 1/6	1285	3540	1125	1016	850	620	300			
BCB10 1/6	1410	3880	1245	1145	1008	855	620			
BCB10 1/4	1560	4290	1395	1285	1168	1014	852	655	325	
BCB10 1/4	1750	4810	1565	1470	1365	1255	1135	980	800	
BCB12 1/6	645	2025	835	470						
BCB12 1/6	727	2280	960	640						
BCB12 1/6	842	2650	1105	855	500					
BCB12 1/6	898	2820	1200	960	670					
BCB12 1/6	1050	3300	1400	1200	970	690				
BCB12 1/6	1095	3430	1490	1275	1055	790	325			
BCB12 1/6	1180	3710	1690	1460	1220	970	660			
BCB12 1/4	1290	4050	1840	1630	1420	1180	935	575		
BCB12 1/3	1445	4540	2050	1870	1680	1490	1300	1070	760	
BCB12 1/2	1590	5030	2260	2100	1930	1770	1590	1390	1170	
BCB15 1/6	524	2060	1330	820						
BCB15 1/6	580	2280	1370	1030						
BCB15 1/6	656	2580	1690	1310	600					
BCB15 1/6	758	2980	1980	1640	1220					
BCB15 1/6	846	3325	2220	1900	1540	1030				
BCB15 1/6	898	3530	2420	2110	1750	1340				
BCB15 1/4	956	3760	2550	2250	1940	1570	1100			
BCB15 1/4	1024	4040	2620	2430	2150	1840	1470	850		
BCB15 1/3	1068	4200	2710	2560	2300	2020	1700	1240		
BCB15 1/3	1180	4640	3030	2820	2600	2370	2120	1830	1470	
BCB15 1/2	1270	5000	3260	3060	2850	2650	2430	2190	1900	
BCB15 1/2	1355	5330	3500	3300	3100	2900	2700	2490	2250	
BCB15 3/4	1435	5640	3680	3510	3330	3150	2960	2770	2570	
BCB15 3/4	1520	5970	3910	3740	3580	3400	3230	3050	2860	
BCB15 1	1650	6480	4320	4170	4020	3870	3710	3550	3380	
BCB18 1/6	468	2200	2050	1390						
BCB18 1/6	537	2520	2335	1830						
BCB18 1/6	602	2825	2650	2200	1500					
BCB18 1/6	655	3080	2950	2480	1910					
BCB18 1/4	735	3450	3260	2890	2400	1800				
BCB18 1/3	807	3790	3570	3250	2865	2390	1660			
BCB18 1/3	850	3990	3700	3425	3100	2640	2120	1410		
BCB18 1/2	930	4370	4230	3875	3500	3145	2750	2220		
BCB18 1/2	978	4600	4420	4100	3770	3450	3070	2610	1950	
BCB18 3/4	1048	4920	4740	4440	4220	3800	3475	3125	2700	
BCB18 3/4	1150	5400	5130	4880	4640	4380	4120	3800	3425	
BCB18 1	1210	5710	5390	5150	4900	4640	4350	4050	3740	
BCB18 1 1/2	1278	6000	5670	5475	5250	5050	4790	4515	4225	
BCB18 1 1/2	1345	6330	5975	5775	5560	5350	5125	4870	4600	
BCB18 2	1460	6860	6480	6300	6115	5930	5740	5520	5290	
BCB18 2	1550	7280	6830	6650	6480	6300	6110	5920	5710	
BCB20 1/6	469	2460	2820	2150						
BCB20 1/6	537	2815	3240	2720	1730					
BCB20 1/4	648	3400	3960	3500	2940	2020				
BCB20 1/3	704	3690	4270	3850	3380	2750	1680			
BCB20 1/3	736	3860	4470	4050	3620	3070	2200	1020		
BCB20 1/2	785	4120	4820	4410	3980	3520	2850	1820		
BCB20 1/2	854	4475	5260	4880	4500	4100	3600	2870	1900	
BCB20 3/4	926	4850	5760	5400	5020	4640	4220	3730	3050	
BCB20 1	983	5150	6150	5820	5450	5070	4670	4250	3750	
BCB20 1	1050	5500	6500	6200	5870	5520	5160	4780	4350	
BCB20 1 1/2	1080	5660	6700	6400	6080	5750	5400	5050	4670	
BCB20 1 1/2	1130	5920	6900	6640	6350	6060	5750	5450	5130	
BCB20 2	1210	6340	7450	7180	6900	6620	6330	6030	5720	
BCB20 2	1260	6600	7750	7500	7230	6960	6680	6400	6100	

Unit Size	H.P.	Fan RPM	Tip Speed	0"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"
BCB24 1/6	366	2300	2220	1480	580					
BCB24 1/6	416	2610	2520	1880	1150					
BCB24 1/4	466	2930	2820	2240	1640	930				
BCB24 1/4	515	3250	3080	2590	2060	1500	790			
BCB24 1/3	565	3550	3370	2930	2450	1970	1430	660		
BCB24 1/2	615	3860	3700	3280	2850	2400	1920	1380	720	
BCB24 1/2	636	4000	3850	3460	3050	2600	2130	1640	990	
BCB24 3/4	712	4470	4280	3940	3590	3220	2830	2410	1970	
BCB24 3/4	748	4700	4530	4200	3850	3500	3130	2740	2320	
BCB24 1	811	5100	4880	4580	4260	3940	3600	3260	2910	
BCB24 1 1/2	858	5390	5170	4880	4570	4270	3950	3640	3300	
BCB27 1/3	384	2715	3320	2535	1685	615				
BCB27 1/3	420	2970	3660	2950	2170	1280				
BCB27 1/2	458	3240	3970	3320	2610	1870	1020			
BCB27 1/2	495	3500	4250	3680	3070	2400	1670	790		
BCB27 1/2	532	3760	4570	4040	3470	2900	2250	1540	670	
BCB27 3/4	568	4020	4820	4350	3850	3300	2740	2100	1420	
BCB27 3/4	624	4410	5400	4940	4450	3960	3440	2920	1700	
BCB27 1	668	4720	5750	5320	4880	4430	3960	3450	2950	
BCB27 1 1/2	712	5030	6100	5720	5320	4900	4450	4010	3550	
BCB27 1 1/2	762	5380	6500	6150	5790	5420	5020	4600	4180	
BCB27 2	810	5720	6950	6600	6250	5900	5520	5140	4750	
BCB30 1/6	284	2225	3270	2180	600					
BCB30 1/4	329	2580	3820	2900	1700					
BCB30 1/3	373	2920	4340	3520	2580	1450				
BCB30 1/2	421	3300	4900	4170	3370	2480	1450			
BCB30 1/2	458	3590	5380	4760	4000	3250	2450	1570	530	
BCB30 3/4	495	3880	5660	5100	4470	3820	3100	2330	1450	
BCB30 3/4	532	4160	6230	5650	5040	4420	3740	3020	2220	
BCB30 1	565	4420	6580	6060	5500	4920	4300	3640	2930	
BCB30 1 1/2	595	4660	7020	6500	5950	5380	4780	4160	3520	
BCB30 1 1/2	638	5000	7540	7060	6540	6020	5460	4880	4300	
BCB30 2	685	5360	8070	7630	7150	6670	6180	5680	5150	
BCB30 2	730	5720	8610	8200	7760	7300	6860	6400	5930	
BCB30 3	762	5970	8970	8580	8170	7750	7320	6870	6420	
BCB33 1/2	288	2490	4550	3250	1820					
BCB33 1/2	336	2900	5150	4200	3050	1770				
BCB33 3/4	363	3140	5670	4720	3680	2550	1270			
BCB33 3/4	395	3420	6080	5300	4400	3400	2330	1050		
BCB33 3/4	439	3800	6770	6050	5250	4340	3400	2330	1050	
BCB33 1	484	4190	7470	6620	6100	5350	4550	3700	2740	
BCB33 1 1/2	506	4380	7970	7280	6530	5740	5020	4230	3370	
BCB33 1 1/2	532	4600	8330	7700	7030	6300	5580	4830	4040	
BCB33 2	592	5120	9300	8740	8120	7500	6850	6220	5530	
BCB33 2	629	5440	9850	9310	8760	8200	7580	6970	6350	
BCB33 3	644	5560	10100	9570	9020	8460	7860	7280	6650	
BCB33 3	679	5870	10850	10400	9930	9440	8920	8390	7850	
BCB36 1/2	278	2620	5525	4250	2575					
BCB36 1/2	307	2895	6100	5025	3675	1950				
BCB36 3/4	336	3170	6675	5775	4625	3100	1150			
BCB36 3/4	366	3450	7275	6375	5275	4075	2750	1000		
BCB36 1	395	3710	7900	7040	6050	5000	3825	2500	1000	
BCB36 1 1/2	424	4000	8650	7750	6800	5800	4750	3640	2320	
BCB36 1 1/2	454	4275	9150	8400	7525	6650	5700	4700	3575	
BCB36 2	485	4570	9900	9100	8300	7450	6600	5700	4750	
BCB36 2	514	4850	10325	9650	8925	8175	7375	6550	5625	
BCB36 3	560	5280	11050	10600	10050	9350	8625	7900	7100	
BCB36 3	590	5560	11600	11200	10750	10075	9400	8700	7975	
BCB39 1/2	234	2390	5980	4420	2620					
BCB39 3/4	268	2740	6840	5450	3700	2000				
BCB39 1	307	3130	7840	6700	5320	3930	2530	1120		
BCB39 1 1/2	338	3450	8630	7670	6360	5000	3630	2260		
BCB39 2	387	3950	9880	9010	8040	6950	5880	4810	3730	
BCB39 3	426	4350	10880	10160	9240	8190	7180	6170	5140	
BCB39 5	488	4980	12450	11870	11100	10220	9330	8430	7590	
BCB39 7 1/2	570	5820	14560	14020	13470	12750	12000	11220	10460	

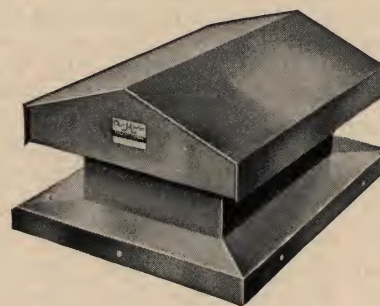
Unit Size	H.P.	Fan RPM	Tip Speed	0"	3/8"	1/4"	3/8"	1/2"	5/8"	3/4"
BCB42	1/2	230	2525	7500	5500	3250				
BCB42	3/4	253	2770	8250	6400	4400	2000			
BCB42	3/4	292	3210	9450	7900	6250	4500	2300		
BCB42	1	326	3580	10500	9150	7700	6200	4550	2650	
BCB42	1 1/2	352	3870	11350	10100	8800	7400	5950	4350	2550
BCB42	2	381	4180	12400	11200	10000	8700	7350	5950	4450
BCB42	2	414	4550	13600	12400	11300	10150	9000	7750	6450
BCB42	3	440	4840	14300	13300	12250	11250	10200	9000	7850
BCB42	3	464	5100	15200	14200	13150	12150	11150	10100	9000
BCB42	5	486	5345	15800	14850	13900	12950	12000	11000	10000
BCB42	5	510	5600	16650	15700	14800	13850	12950	12000	11000
BCB42	5	534	5860	17400	16550	15650	14750	13900	13050	12150
BCB42	7 1/2	570	6260	18550	17750	16950	16150	15350	14550	13700
BCB48	3/4	199	2500	9550	7000	4000				
BCB48	3/4	233	2925	11100	9000	6650	3900			
BCB48	1	250	3140	12000	10050	7850	5400	2400		
BCB48	1 1/2	284	3570	13700	11900	10000	8000	5800	3200	
BCB48	2	300	3780	14500	12800	11000	9200	7150	4850	2230
BCB48	2	326	4100	15900	14250	12550	10850	9100	7200	5000
BCB48	3	352	4420	17150	15600	14050	12500	10900	9200	7450
BCB48	3	377	4740	18200	16850	15500	14100	12650	11100	9500
BCB48	5	397	4990	19300	18000	16650	15350	13950	12500	11050
BCB48	5	420	5275	20400	19150	17900	16650	15400	14050	12700
BCB48	5	448	5650	21800	20600	19400	18250	17100	15850	14600
BCB48	7 1/2	467	5860	22700	21600	20450	19350	18200	17050	15850
BCB48	7 1/2	490	6150	23800	22800	21700	20600	19500	18450	17350
BCB54	3/4	184	2600	12600	9400	5800				
BCB54	1	204	2880	13900	11100	8000	4350			
BCB54	1 1/2	224	3170	15300	12800	10000	6950	3350		
BCB54	1 1/2	253	3580	17350	15200	12750	10050	7200	3900	
BCB54	2	274	3870	18700	16700	14500	12150	9600	6900	3800
BCB54	3	288	4070	19650	17800	15700	13500	11150	8700	6000
BCB54	3	313	4420	21450	19600	17700	15750	13700	11600	9250
BCB54	5	331	4680	22700	21000	19200	17400	15500	13500	11400
BCB54	5	350	4950	24200	22500	20750	19000	17250	15400	13500
BCB54	7 1/2	378	5340	26050	24500	22850	21300	19650	18000	16200
BCB54	7 1/2	406	5740	28000	26500	25000	23550	22050	20500	18950
BCB54	7 1/2	420	5940	29000	27600	26150	24750	23300	21800	20300
BCB54	10	448	6340	30900	29600	28200	26850	25450	24050	22650
BCB60	1	160	2520	15000	11150	6500				
BCB60	1 1/2	192	3000	18000	14700	11000	7000			
BCB60	2	206	3240	19400	16400	13150	9400	5150		
BCB60	2	222	3490	21150	18150	15100	11800	8300	3300	
BCB60	3	245	3850	23300	20600	17850	15000	12000	8700	4900
BCB60	3	261	4100	24900	22300	19700	17100	14400	11400	8200
BCB60	5	276	4340	26500	24100	21700	19200	16700	14000	11200
BCB60	5	300	4710	28700	26400	24100	20900	19600	17200	14800
BCB60	7 1/2	327	5145	31100	29100	27100	25100	23100	20800	18700
BCB60	7 1/2	339	5330	32200	30200	28300	26400	24400	22400	20300
BCB60	10	362	5700	34300	32500	30700	28900	27100	25200	23300
BCB60	10	373	5865	35400	33600	31800	30100	28200	26400	24500
BCB66	1	151	2610	18300	14300	8700				
BCB66	1 1/2	168	2900	20200	17000	12400	6900			
BCB66	2	188	3250	24100	20000	15700	11500	6700		
BCB66	3	201	3470	25700	21900	18000	14100	9900	4300	
BCB66	3	224	3880	28400	25100	21700	18200	14400	10600	5300
BCB66	5	240	4150	30500	27300	24200	21000	17600	14300	10500
BCB66	5	256	4420	32600	29700	26700	23700	20700	17400	14000
BCB66	7 1/2	269	4650	34100	31400	28700	26000	23100	20100	16900
BCB66	7 1/2	295	5100	37200	34800	32400	29900	27400	24700	22000
BCB66	7 1/2	304	5250	38500	36100	33700	31300	28800	26300	23700
BCB66	10	326	5630	41200	39000	36700	34500	32200	29900	27600
BCB66	10	339	5850	42700	40600	38500	36300	34200	32000	29800
BCB72	1 1/2	142	2680	23600	17900	12200	6700			
BCB72	2	156	2940	25700	20600	15100	10100	5000		
BCB72	2	174	3280	28400	23900	19100	14100	7800		
BCB72	3	188	3540	30700	26700	22500	17800	12600	6900	
BCB72	5	209	3940	34400	30600	26700	22600	18500	13800	8200
BCB72	5	224	4220	36700	33200	29800	25900	22100	18100	13400
BCB72	7 1/2	232	4370	37900	34700	31200	27700	23900	20100	15600
BCB72	7 1/2	247	4660	40600	37300	34100	30700	27300	23700	20200
BCB72	10	263	4960	43200	40200	37200	33900	30700	27500	24100
BCB72	10	288	5420	47000	44500	41600	39000	36000	32800	30200

Section B

Airmepeler "RC" LO BOY ROOF or RELIEF EXHAUSTERS

Lo Boy "RC" Roof or Relief Exhausters are similar in appearance to the "BCB" Lo Boy power exhauster. May have square, rectangular or round throat for use as GRAVITY EXHAUSTER, PRESSURE RELIEF or FRESH AIR INTAKES.

Standard construction, mild steel, 18 gauge cap and 16 gauge base, finished with gray enamel paint. May have hinged top if so specified for access to damper or other equipment.



Specification: Furnish and install where shown on drawings of the sizes shown, (AIRMEPELER) "RC." Lo Boy Roof or Relief Ventilators as manufactured by the Ammerman Co., Inc., Stillwater, Minnesota, or approval equal, constructed of manufacturer's standard gauge mild steel painted. Specials, copper, stainless or galvanized as requested.

AIRMEPELER 'RC' DIMENSIONS TABLE NO. 10

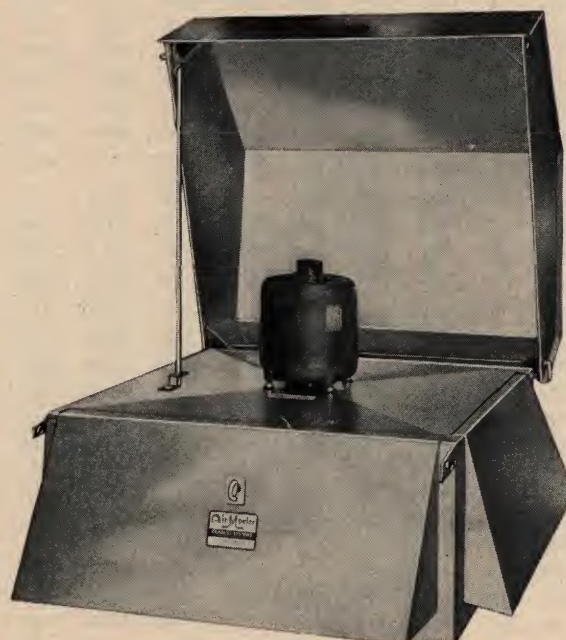
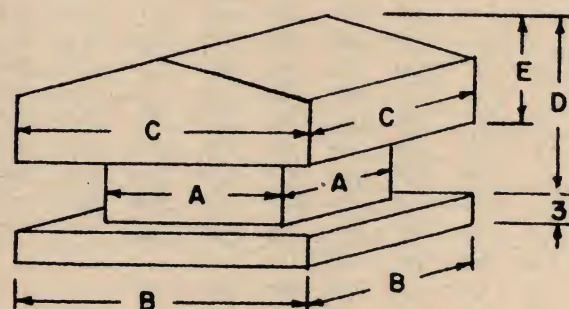
Size	Inlet Area Sq. In.	A	B	C	D	E	F	Weight Steel	Alum.
RC6	36	6	16	14	10	5	3	18	10
RC8	64	8	16	14	10	5	3	18	10
RC10	100	10	20	18	11	6	3	23	13
RC12	144	12	20	18	11	6	3	23	13
RC14	196	14	24	24	12	7	3	32	18
RC16	256	16	24	24	12	7	3	32	18
RC18	324	18	28	30	14	9	3	46	23
RC20	400	20	28	30	14	9	3	46	23
RC22	484	22	32	34	15	10	3	58	29
RC24	576	24	32	34	15	10	3	58	29
RC26	676	26	36	40	17	12	3	74	37
RC28	784	28	36	40	17	12	3	74	37
RC30	900	30	40	46	18	13	3	90	45
RC32	1024	32	40	46	18	13	3	90	45
RC34	1156	34	44	52	19	14	3	108	54
RC36	1296	36	44	52	19	14	3	108	54
RC38	1444	38	48	58	22	16	3	152	70
RC40	1600	40	48	58	22	16	3	152	70
RC42	1764	42	52	60	23	17	3	160	74
RC48	2304	48	56	68	25	19	3	186	87

Capacity ratings at 5 M.P.H., 20° F., temp. diff. 40' stack height.

'BCD' BACKWARD CURVE DIRECT DRIVE 'PRE'

Same construction as HI BOY but with motor directly connected to wheel. Capacities same as "BCD" Airxepeler see page 3.

AIR RATINGS . . . tested and rated in accordance with test codes adopted by the National Association of Fan Manufacturers, and American Society of Heating and Ventilating Engineers.





KITCHEN FANS Section C

 20c
Amm

MODEL 300 TWIN BLOWER

Specifications

AIR DELIVERY—400 c.f.m. without filter—325 c.f.m. with filter.

BLOWERS—two conical backplate Torrington wheels, $2\frac{1}{2}$ " x $5\frac{1}{2}$ ".

MOTOR—rubber mounted shaded pole, 102 watts, 115 volts, 60 cycle, 1550 r.p.m. double shaft.

HOUSING—8" x 8" x 14" adjustable mounting lugs, baked enamel finish.

GRILLE— $10\frac{1}{2}$ " x $16\frac{1}{2}$ " bright anodized aluminum.

SHIPPING WEIGHT—17 pounds.

- Adjustable mounting lugs for easy installation
- Horizontal or vertical discharge
- Maximum air delivery
- Rubber mounted, whisper quiet operation
- Blower assembly easily removed without tools
- Easy to clean. Fan disassembles in just 30 seconds



Listed by Underwriters' Laboratories, Inc.

AirXpeler CEILING FANS

For kitchens, utility rooms, recreation rooms, offices.
For bathrooms, laundry rooms, darkrooms, and dens.

• **"VENTURI-DESIGN" GRILLE** — "Hushed" air movement, unmatched volume, louver design partially conceals fan interior, easily removed for cleaning.

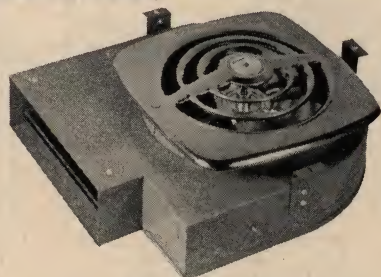
• **BACK DRAFT DAMPER** — Superior design, custom fitted, no air leakage.

• **FAN BLADE DESIGN** — 6 wings, wind tunnel engineered, produces maximum air movement, minimum air noise.

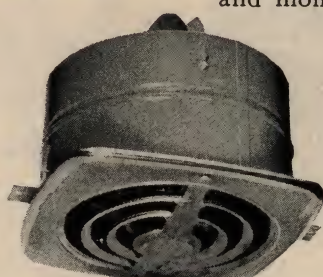
• **EASILY INSTALLED** . . . Mounting lugs are adjustable for finished plaster or $\frac{1}{2}$ " dry-wall.

• **CONVENIENT KNOCKOUTS and OUTLET BOXES** — Contractor designed to simplify electrical connections.

• **FITTINGS and WALL CAPS** — Equipped with well designed, efficient back-draft dampers where necessary. Simplify installation problems, save time and money.



10" No. 400
8" No. 860S and No. 860W
(Can be installed in ceiling or sidewall)



10" No. 451
8" No. 872S and No. 872W
(No. 71 Levolver pull-chain switch may be used)



6" No. 600
(For bathrooms only)

SPECIFICATIONS:

MODEL NO.		600	860S, 860W	400	872S, 872W	451
C.F.M.	8' Duct	100	350	400	450	500
	Free air	—	850	1200	850	1100
FAN	Dia.—In.	6	8	10	8	10
	No. Blades	4	6	6	6	6
MOTOR* RATINGS	Watts	30	48	85	45	60
	R.P.M.	—	1500	1400	1500	1550

GRILLE — All are $11\frac{3}{4}$ x $11\frac{3}{4}$ in. except No. 600 ($7\frac{3}{4}$ in. in dia.). All all stainless steel except No. 600 and models with suffix W, which are white baked enamel.

HOUSINGS — Gray baked enamel.

* — Shaded-pole, 120V, 60CY, AC.

3 SPEED SWITCH

No. 51 — For use with Nos. 451, 860, 870, 872. Furnished with chrome wall plate. Install in single gang $2\frac{3}{4}$ " deep switch box.

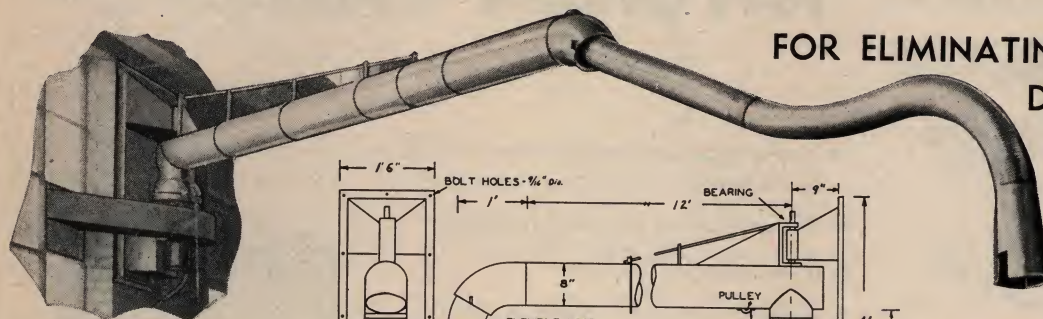


TIME SWITCH

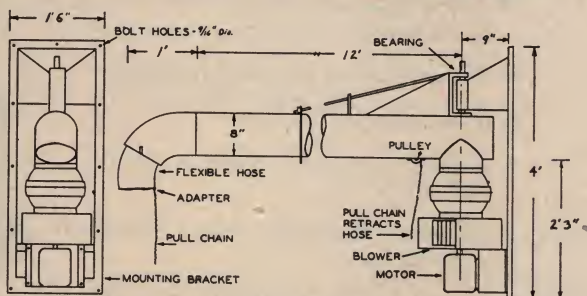
No. 59 — Can be used with all fan models. Ideal for bathroom and powder rooms. Operates at any interval up to 60 minutes. This added feature allows the fan to operate for a limited time after occupancy. Fits single gang, standard switch box.

FOR COMPLETE DETAILS WRITE FOR BUL. No. 100K

BULLETIN 100-1959



For Diesels — SW512-400 CFM at 2800 F.P.M. complete with blower. SW-512A without blower.



For Automobiles—SW312-100 CFM at 1600 F.P.M. complete with blower. SW312A without blower.

FOR ELIMINATING CARBON MONOXIDE, DIESEL SMOKE, WELDING, SOLDERING AND SPOT VENTILATION.

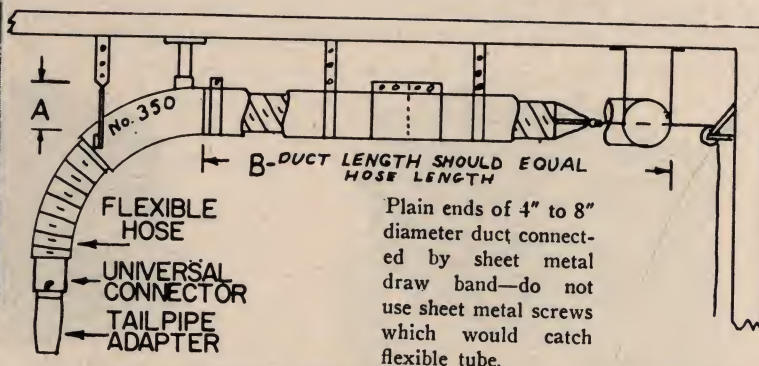
MOUNTING PERMITS 180° SWING RANGE

Can be designed for individual requirements. Collects fumes at the source hose up to 5". Can be installed by anyone handy with tools. Heavy rigid construction. Standard units extend 22 feet from wall.

NO. 350 OVERHEAD DISAPPEARING SYSTEM



Model No. 350 is the newest, most practical method for extracting smoke or carbon monoxide gas when it is not desired to have an under-floor fixture. Flexible hose (2½") may be either AIRXPELER No Crush Neoprene or Metal. Hose retracts into ceiling when not in use. Heavy cast aluminum intake fixture designed for easy, smooth, dependable trouble-free performance.



SIZE	A BRANCH DUCT DIAMETER	HOSE O.D.	CFM
350-4	4"	to 3"	100
350-6	6"	to 4"	150
350-8	8"	to 6"	350

Plain ends of 4" to 8" diameter duct connected by sheet metal draw band—do not use sheet metal screws which would catch flexible tube.

Heavy cast aluminum fixture designed for repair garages, service stations and residence garages. Flexible hose should extend from exhaust tailpipe through door or wall outlet. Doors remain closed during cold weather. Low cost. Easy to install.

No. 30 takes hose up to 3" O.D. No. 40 to 4" O.D.



AMMERMAN'S AirXpeler®

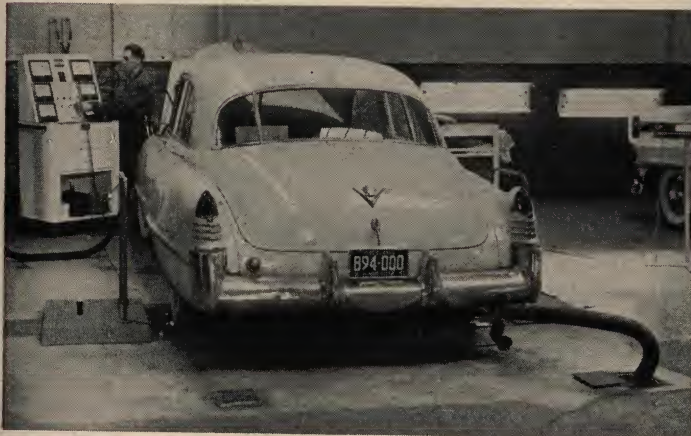
UNDERFLOOR—Garage or Welding EXHAUST SYSTEM FIXTURES

20c
Amm

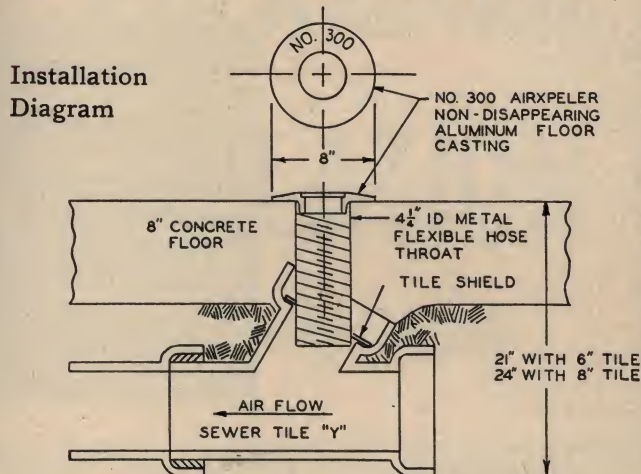
Section

C

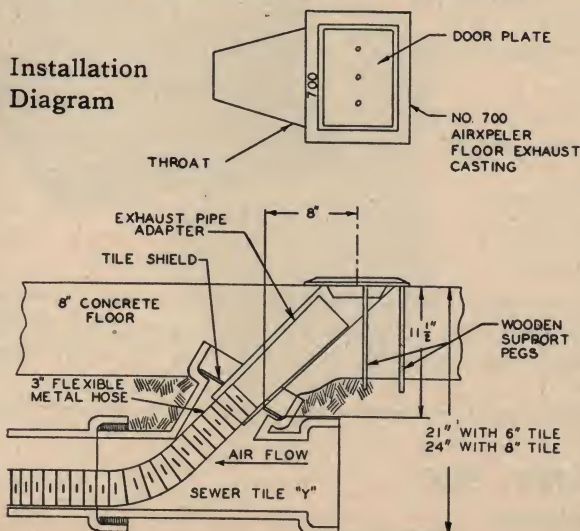
Garage system floor fixtures are heavy cast aluminum with steel throats and tile shields. Flexible hose and tailpipe adapters slide in and out from under the floor.



No. 300 NON-DISAPPEARING FIXTURE



No. 700 DISAPPEARING FIXTURE

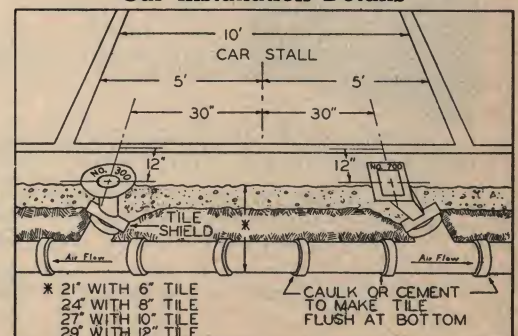


SPECIFICATIONS:

	Non-Disappearing		Disappearing		
Model No.	300	400	600	700	1000
No. of Hoses	1	2	2	1	1
Hose Size* IN: OD	up to 3	up to 3 (each)	up to 4 (each)	up to 4	up to 6
Min. Exhaust Tile size-in.**	6	6	12	6	12
Cover Plate	Not hinged	Hinged	Hinged	Hinged	Hinged
*3 in. hose-100 CFM 4 in. Hose-150 CFM		*5 in. Hose-250 CFM 6 in. Hose-350 CFM		** Larger Tile Size Preferred	

Submit sketch
for
recommended
installation.

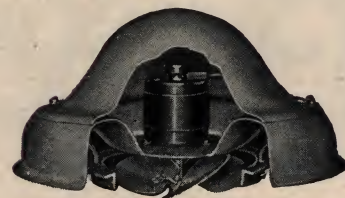
Car Installation Details



AMMERMAN'S **AirXpeler** DRAFT INDUCER

Section C

"DIPB" Pressure Blade Draft Inducers Eliminate tall costly chimneys. Give positive draft at low cost. One piece storm-band motor mount and motor cover spun of aluminum. Motor mounted—out of line—of hot flue gases, eliminating motor trouble. "DIPB" units available with or without base. For direct stack mounting give OD of chimney for supplying proper mounting ring.



BOILER & FURNACE DRAFT INDUCERS TABLE NO. 11

PUMPS TABLE NO. 1								
Size	H.P.	R.P.M.	C.F.M.	Connecting		Fuel per hour		Gas C.F. Coal 1000 BTU
			0" S.P. at 700 F.	Min.	Ring Dia. Max.	gals. Oil	lbs.	
DIPB-8A	1/20	1725	420	9"	10"	4	48	960
DIPB-10A	1/6	1725	821	11	12	8	96	1920
DIPB-12A	1/6	1725	1419	13	14	14	168	3360
DIPB-14A	1/4	1725	2259	15	16	22	264	5280
DIPB-16A	1/2	1725	3360	17	18	33	396	7920
Standard base use "PB" dimension table No. 3 or special base may be had if required.								

Standard base use "PB" dimension table No. 3 or special base may be had if required.

HOME FIREPLACES STANDARD BASE DIMENSIONS

TABLE No. 4a

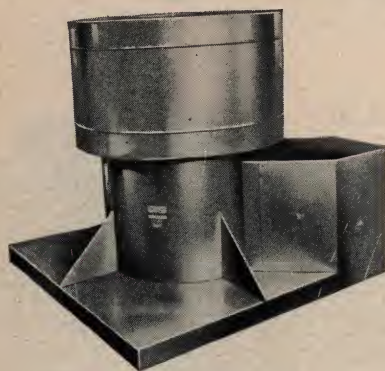
DIBC-7A

H.P.	R.P.M.	C.F.M.	A	B	C
1/20	1725	570	6	18	19

DIBC-9A

1/8	1725	1000	8	18	19
-----	------	------	---	----	----

AIRMEPEL UPBLAST ROOF EXHAUSTERS*



Designed for immediate heat, smoke and fume expulsion. Split disc damper that automatically opens when fan is turned on provides weather proofed units. Direct drive units equipped with totally enclosed ball bearing motors.

Belt driven units furnished with motors out of line of airflow in separate weather proof compartment.

AIRMEPEL LOUVERS*

- Stationary (wall) adjustable, storm proof.
- Opposed action blade, air control, double mixing dampers.
- Single and multi-blade fusible link fire dampers.
- Back draft and counter balanced relief dampers.



AIRMEPEL 'RUL AIR' GRAVITY VENTILATORS*



Sturdily constructed, weather proofed. Discharge area sufficiently large to provide ample free air flow. Bird screen furnished with all units.

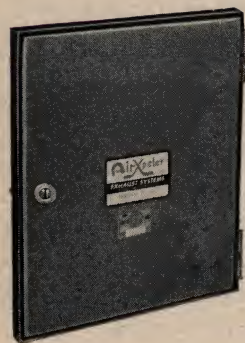
AIRMEPEL 'RV' GRAVITY VENTILATORS*

Square or rectangular design to accommodate specific duct requirement. Weather proof, sturdily constructed. Bird screen is standard equipment.



AIRXPELER ACCESS DOOR FOR DUCTS*

Doors have 1/2" insulation and fit flush on inside to eliminate air turbulence in duct. Asbestos gasket, separated from duct results in a fireproof seal.



*FOR DETAILED INFORMATION
WRITE FOR SPECIAL BULLETINS

All Ammerman Airxpeler and Airmpeler products are union made. Sheet Metal workers local, International association No. 547, Minneapolis, Minnesota.

Manufactured by
AMMERMAN COMPANY, INC.
Stillwater, Minnesota

Digitized by:



ASSOCIATION
FOR
PRESERVATION
TECHNOLOGY,
INTERNATIONAL
www.apti.org

BUILDING
TECHNOLOGY
HERITAGE
LIBRARY

<https://archive.org/details/buildingtechnologyheritagelibrary>

From the collection of:

Carol J. Dyson, AIA